

(12) INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

(19) World Intellectual Property
Organization
International Bureau



(43) International Publication Date
7 October 2004 (07.10.2004)

PCT

(10) International Publication Number
WO 2004/085087 A2

(51) International Patent Classification⁷: **B21B 37/00, 38/00**

(21) International Application Number: **PCT/IN2004/000070**

(22) International Filing Date: 26 March 2004 (26.03.2004)

(25) Filing Language: English

(26) Publication Language: English

(30) Priority Data:
188/KOL/03 28 March 2003 (28.03.2003) IN

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(81) Designated States (*unless otherwise indicated, for every kind of national protection available*): AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW.

(84) Designated States (*unless otherwise indicated, for every kind of regional protection available*): ARIPO (BW, GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR), OAPI (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).

Published:

- without international search report and to be republished upon receipt of that report

For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.

WO 2004/085087 A2

(54) Title: **A SYSTEM AND METHOD FOR ON-LINE PROPERTY PREDICTION FOR HOT ROLLED COIL IN A HOT STRIP MILL**

(57) **Abstract:** This invention provides a system for on-line property prediction for hot rolled coils in a hot strip mill of a steel plant. The system comprises a unit (5) for capturing the chemistry from the steel making stage and providing the data on rolling schedule. Field devices (FD1 ... FDn) are provided at the instrumentation level for measuring process parameters during hot rolling. A programmable logic controller (1) is used for acquiring data of measured parameters from the field devices and feeding the data to a processor (2). Means (3) is provided for conversion of the measured data from time domain To space domain using segment tracking. A computation module (4) processes the converted space domain data for predicting mechanical properties along the length and through the thickness of the strip being rolled. A display unit (6) displays the predicted properties. The data obtained can be stored in a data warehouse (8) for future use. A unit (7) provided in the system can collect the predicted properties and feed the same to the scheduling unit (5).